REMARKS

This paper is in response to the office action dated September 19, 2005. The Examiner is thanked for the careful review of the application. A response is due January 19, 2006 with a one month extension of time. Claims 1-24 are pending.

Objections to the Claims and the Disclosure

The Office objected to claims 1-24 because of the use of the word miscompare which is not a valid English word. Likewise, the disclosure was objected to because of the use of the word miscompare. Applicant agrees with the Examiner that the word miscompare is not a standard word to be found at present within the English dictionary. However, Applicant respectfully submits that this word is part of the vocabulary of those of ordinary skill in the art and is thus permissible in the claims and the disclosure. One example of the use of miscompare can be found in a draft document originated by the technical committee T10 which operates under ANSI and is responsible for SCSI interfaces (http://www.t10.org/ftp/t10/drafts/sdv/sdv-r08b.pdf.). Another example can be found from the technical support files of a well-known SCSI storage device manufacturer (http://www.hitachigst.com/hddt/knowtree.nsf/0/6ff4f9f34004701f8625673100072eab1?Open Document). Both of these sources provide information to those of ordinary skill in the art of SCSI devices.

Additionally, it is settled law that the inventor can be his own lexicographer and the use of miscompare is consistently used in the as-filed application. Applicant therefore, respectfully requests that the Office remove the objection to the use of the term miscompare in the claims and in the disclosure.

Claim Rejections Under 35 U.S.C. § 103(a)

The Office rejected claims 1-4, 14, 15, 21, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Wang et al. U.S. Patent No. 6,834,326 ("Wang") in further view of Long U.S. Patent No. 5,890,014 ("Long"). Further, the Office rejected claims 5-13, 16-20, and 22 over Wang in further view of Long in further view of Hwang et al. U.S. Patent No. 6,339,599 ("Hwang"). Applicant respectfully traverses these rejections and any suggestions associated with those rejections. As discussed below, Applicant respectfully submits that the cited prior art references in combination do not disclose or suggest all of the features of the claimed invention.

Wang discloses a networked storage device configured to use packet multicasting. An intelligent switch in communication with a plurality of storage devices is used as a RAID controller. The system uses a form of SCSI-over-IP/Ethernet protocol to form the switched RAID system.

Long discloses a system and method for optimizing data transfer performance between a host computer and a peripheral. A device driver analyzes each I/O requests and searches for I/O patterns. The I/O patterns determine whether changes to the peripheral's parameters are needed in order to optimize data transfer performance between the host computer and the peripheral.

Independent claim 1 defines a method for verifying bus performance in a multiple initiator environment. A first initiator implements the method by generating a key data pattern which includes a key header and a pattern. The key header includes data identifying

the first initiator. After the key data pattern is generated, it is written to an echo buffer of a target and then read from the echo buffer of the target. Once read, the key header is examined to ascertain a level of communication integrity. The examining determines a throughput capability of the physical connection between the initiator and the target and determines whether the key data pattern read from the echo buffer includes a byte miscompare.

Combined, Wang and Long do not disclose or suggest all of the features of the claimed invention. First, Wang does not disclose sending a key data pattern to an echo buffer of a target and reading the key data pattern from the echo buffer of the target for several reasons. Wang discloses sending the address of disks to a RAID controller and vice versa. RAID parameters are sent to the disks and then discs supply characterization information back to the RAID controller (col 9 lines 5-11). If disks send their address to a RAID controller and then the RAID controller sends it's address to the disk, this is not the same as Applicant's claimed invention because the information passed between the initiator and target are not the same. Likewise, the passing of RAID parameters to the disks by the RAID controller to the disc and characterization information being sent from the discs to the RAID controller do not involve exchanging the same key data pattern from an initiator to the echo buffer of a target and from the echo buffer back to the initiator. Applicant's claimed invention passes a key data pattern from an initiator to the echo buffer of a target and the initiator reads the key data pattern from the echo buffer of the target.

Along with this difference, Wang also discloses that the address information is first sent to an initiator. Applicant's claimed invention sends the key data pattern from the initiator to the echo buffer of a target first before reading the key data pattern from the echo buffer of the target.

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Next, Wang teaches that address information, RAID parameters, and characterization information are exchanged between the initiator and the target. None of these is a key data pattern. An address for a device on a LAN is an IP address to locate the device on a network so that the device can operate with other devices connected to the network. The IP address is not generated by an initiator; it is generated by an admininistrator who manages the network. Also an IP address sent by the target will not include data identifying the initiator because an IP address only identifies a single address of the target device. Likewise, RAID parameters are not key data patterns. RAID parameters include such information as RAID-level stripe size and multicast group (col 9 lines 8-9). RAID parameters are settings which configure the RAID controller's behavior when controlling an array of disks and are not disclosed to include a key header. Characterization information also is not a key data pattern. Characterization information includes storage capacity and performance metrics of a storage device and does not contain information identifying an initiator. The characterization information describes properties of the discs and is not generated by the initiator. Applicant's claimed invention writes key data pattern generated by an initiator to an echo buffer of a target and reads the key data pattern from the echo buffer of the target. The key data pattern includes data identifying the initiator.

Finally, Wang does not disclose writing to and reading from an echo buffer of the target. As known by those skilled in the art, an echo buffer is an optional 252 character buffer on a target device which assists with enhanced Domain Validation. To write to or read from an echo buffer of a target requires commands which specify the echo buffer of a target as either the data source of a read or the data destination of a write command. Applicant's claimed invention specifically operates with the echo buffer of a target.

Long also does not disclose writing to and reading from an echo buffer of a target and further, teaches that each I/O request is analyzed to identify whether a target is optimally tuned. In Long, an I/O pattern represents a data storage specific I/O response characteristic for predetermined I/O pattern for a data storage device (col 7 lines 19-26). Applicant's key data pattern is not an I/O characteristic of a data storage device. An I/O pattern includes such information as the size of the I/O request, the number of I/O requests issued in a given time period, etc. (col 7 lines 41-54) and is not disclosed to contain a key header. Along with this difference, Long teaches that the I/O pattern is generated either by the storage device's performance pattern or by the operating system. The initiator does not create the I/O pattern. Applicant's claimed invention generates a key data pattern from a first initiator and writes the key data pattern to an echo buffer of a target. The target does not write the key data pattern based on the target's I/O performance characteristic and the key data pattern is not created by the operating system. Applicant's claimed invention only examines the key header read from the echo buffer and does not examine each I/O request.

Therefore, the combination of Long and Wang, would not work because the combination would either initiate data exchange from the target device or would send the wrong type of information between the target device and analyze each I/O request made from an target to an initiator. In all cases, the combination would not utilize the echo buffer of the target. Consequently, the combination of Wang and Long would not be able to discern whether data transferred to a first initiator from an echo buffer contained data corruption.

For at least the same reasons discussed above, Applicant respectfully submits that the remaining independent claims and the dependent claims are allowable. Applicant therefore,

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respectfully requests a Notice of Allowance based on the foregoing remarks. If the Examiner

has any questions concerning the present amendment, the Examiner is kindly requested to

contact the undersigned at (408) 774-6911. If any other fees are due in connection with filing

this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-

0805 (Order No. ADAPP137). A copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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